



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>


Supplier Information			
Company Name *	STMicroelectronics	Response Date *	29-07-2022
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	Material Declaration champion	Representative Title	Material Declaration champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
BLUENRG-345AC	3N42*F1618B9	A	997G	29-07-2022
	Amount	UoM	Unit type	ST ECOPACK Grade
	69.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	NiPdAuAg	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	5x5x1.0	32	flat	
Comment	Package : 42 VQFPN 5X5x1.0 32L PITCH 0.5 7376875			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	FALSE
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-17 Jan 2022				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	3N42*F1618B9				5000001.0	999986.0				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die or dies	M-011 Other inorganic materials	6.514	mg	supplier	die	Silicon (Si)	7440-21-3		6.177	mg	948265	89522				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	2456	232				
				supplier	metallization	Copper (Cu)	7440-50-8		0.143	mg	21953	2072				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.046	mg	7062	667				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	307	29				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	154	14				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	5527	522				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.093	mg	14277	1348				
				Leadframe-C194-UPG PPF	Copper & its alloys	31.282	mg	supplier	Alloy	Copper	7440-50-8		30.062	mg	961015	435684
								supplier	Alloy	Zinc	7440-66-6		0.038	mg	1230	558
supplier	Alloy	Ferrous	7439-89-6						0.725	mg	23170	10504				
supplier	Alloy	Phosphorus	7723-14-0						0.025	mg	810	367				
supplier	coating	Nickel	7440-02-0						0.400	mg	12795	5801				
supplier	coating	Palladium	7440-05-3						0.015	mg	490	222				
supplier	coating	Gold	7440-57-5						0.009	mg	275	125				
supplier	coating	Silver	7440-22-4						0.007	mg	215	97				
Die Attach-CDF515P12C	M-011 Other inorganic materials	2.684	mg	supplier	Glue	Silver	7440-22-4		2.161	mg	805000	31313				
				supplier	Glue	Modified Epoxy Resin	Trade secret		0.174	mg	65000	2528				
				supplier	Glue	Amines, C3-6-alkylenedi-, polymers with 5,5'-[1,2,2,6,6-tetraethylpiperidine-1,4-diyloxy]di-	1224691-98-8		0.174	mg	65000	2528				
				supplier	Glue	Formaldehyde, polymer with amiline, maleate	67784-74-1		0.174	mg	65000	2528				
Bonding wire -AuPdCu wire	M-011 Other inorganic materials	0.907	mg	supplier	Bonding wire	Copper	7440-50-8		0.875	mg	965000	12685				
				supplier	Bonding wire	Palladium	7440-05-3		0.023	mg	24990	328				
				supplier	Bonding wire	Gold	7440-57-5		0.009	mg	10000	131				
				supplier	Bonding wire	Silver	7440-22-4		0.000	mg	10	0				
Encapsulation- G700LTD	M-011 Other inorganic materials	27.612	mg	supplier	Molding compound	Epoxy Resin	Trade secret		1.381	mg	50000	20009				
				supplier	Molding compound	Phenol Resin	Trade secret		0.746	mg	27000	10805				
				supplier	Molding compound	Silica (Amorphous)A	60676-86-0		24.023	mg	870000	348155				
				supplier	Molding compound	Silica (Amorphous)B	7631-86-9		1.381	mg	50000	20009				
				supplier	Molding compound	Carbon Black	1333-86-4		0.083	mg	3000	1201				